

SOUTHWEST FISHERIES CENTER

HONOLULU, HI 96812

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January 1984

HONOLULU LABORATORY

NATIONAL MARINE FISHERIES SERVICE

CROSS TABULATIONS OF CATCHES OF LARGE PELAGIC SPECIES BASED ON HAWAII COMMERCIAL CATCH REPORTS, JANUARY 1976 - APRIL 1981. II. SPECIES BY AREA FISHED AND FISHING GEAR

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Not for Publication

ADMINISTRATIVE REPORT H-84-2

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INTRODUCTION

In the first number of this series, we presented cross tabulations of the commercial catches of the Pelagic Species Management Unit in Hawaii to illustrate the variation and importance of various fishing areas and gears. Tables were presented for fishing areas containing summed catches by species and by fishing gears by species and then for fishing gears by species and by fishing areas by species.

In this paper, the emphasis is on species, namely the billfishes (Families Istiophoridae and Xiphiidae), mahimahi (Coryphaena sp.), wahoo, (Acanthocybium solandri), and sharks (Families Sphyrnidae and Carcharhinidae). Tables are set up by species and gear, then by species, gear, and area fished, and finally by species, area, and gear. The same data are presented in all of these tables. The different arrangements provide a different perspective for interpretation by the Plan Development Team and others associated with the development of a fishery management plan for these species.

Some explanation of the species names used in these tables is in order. Since the summaries are based on the statistics provided by the Division of Aquatic Resources, we have followed the naming conventions used by them. With respect to fish names: "swordfish" refers to billfish (Families Xiphiidae and Istiophoridae) or undifferentiated species, whereas "broadbill" is the swordfish (Xiphias gladius); "ono" is the Hawaiian name for wahoo (Acanthocybium solandri); sharks are divided into "hammerhead shark" (Sphyrna sp.) and "shark" (mostly Carcharhinidae) categories, both of which are mixtures of species. With respect to areas or regions, the State of Hawaii's fishery statistical zones are arranged in 0 to 2, 2 to 20, and beyond 20 nmi strata. Thus, it is not possible to summarize the data by 0 to 3 and 3 to 200 nmi zones without using some arbitrary approximating procedures. Also, catches from the Northwestern Hawaiian Islands (NWHI) can be differentiated from those in the main Hawaiian Islands, and we have chosen to do so in the following tables without regard to distance zones around the islands. With respect to fishing gear types, "flagline" refers to tuna longline fishing gear; "deep-sea handline" is generally a multi-hook gear fished in deep water for snappers whereas "inshore handline" gear is generally fished in shallower water for goatfish (the Mullidae), akule (bigeye scad, Selar crumenophthalmus), and other shallow water fishes; however, the distinction is not clear.

SPECIES BY GEAR

For striped marlin (Tetrapturus audax), flagline or tuna longline gear was the most important in 1976 through 1979, but by 1980, trolling gear accounted for most of the catches (Table 1). This change reflects an apparent increase in trolling activity and a decline in longline fishing or underreporting of catches by longline fishing.

For blue marlin (Makaira nigricans), trolling has contributed the greatest amount of catch, and again the data indicate that longline catches have become less important. Also, deep-sea handline catches have become progressively more important.

Reported catches of "broadbill" (swordfish) indicate that deep-sea handline has displaced longline as the most important gear for this species. The deep-sea handline category in the State of Hawaii's reporting system includes the night tuna (ika shibi) fishery.

Catches of sailfish (Istiophorus platypterus), shortbill spearfish (T. angustirostris), and black marlin (M. indica) are much less than the other billfish species, and trolling and flagline have been the most important fishing gears.

For mahimahi and ono, trolling line is the most important gear, but the proportion caught by deep-sea handline has increased, particularly for mahimahi.

For the shark category, the rank of the gear types has varied considerably with trolling and deep-sea handline catches becoming more important in later years.

SPECIES BY GEAR AND REGION

For striped marlin, catches by flagline and trolling line, the two most important gears have been greatest in the 2-20 nmi region (Table 2).

Catches of blue marlin by the most important gear, trolling line, have been largest in the 2-20 nmi area. This is true of the other gears as well.

Catches of "broadbill" have been greatest in the 2-20 nmi area for both flagline and deep-sea handline gear, and handline has recently displaced flagline as the most important gear.

For the sailfish, shortbill spearfish, and black marlin the 2-20 nmi zone has been the most important using trolling line.

The largest catches of mahimahi and ono have occurred in the 2-20 nmi region for trolling line and most other gears.

Shark catches exhibited no consistent fishing gear, nor regional pattern.

SPECIES BY REGION AND GEAR

For striped marlin in the 0-2 nmi zone, trolling line has consistently contributed the greatest catch and has replaced flagline as the most important in the 2-20 nmi zone (Table 3). In the greater than 20 nmi area, flagline remains the most important although the proportion of trolling catches have increased substantially. Catches in the NMHI were reported only in 1981.

For blue marlin in all areas, trolling line accounts for more catches than all the other fishing gears. Catches in the NWHI are reported for 1980 and 1981.

For "broadbill," the catches are relatively small and the importance of different gear types varies with region and year. In the greater than 20 nmi region, flagline has generally been the most important gear. In the 2-20 nmi region, deep-sea handline appears to have displaced flagline in importance. Catches in the NWHI are reported for only 1 year.

For sailfish the largest catches occur in the 2-20 nmi zone, and in this zone trolling line has contributed the greatest catch.

For mahimahi and ono in all zones, trolling line has been the most important gear except for the NWHI where deep-sea handline was sometimes more important. Catches are reported in the NWHI for all years for both species.

For shark, there is no consistent pattern in the contribution of various gear types by zone over these years.

For shortbill spearfish, the 2-20 nmi area is the most important, and flagline and trolling line are the most important gears in this area. In other areas, there is no consistent pattern of the importance of the various gears. Catches in the NWHI were reported in 1980 and 1981.

For black marlin, catches are significant only in the 2-20 nmi zones, and trolling line contributed the greatest catch in this area and generally in other areas as well.

II TABLE 1.--HDAR 1976 DATA BY SPECIES AND GEAR.

GEAR	LB CAUGHT	LBSOLD	REVENUE
SPECIES = STRIPED MARLIN			
FLAGLINE	74,264	74,264	\$81,118
DEEP-SEA HANDLINE	12,339	11,386	\$4,420
INSHORE HANDLINE	79	79	\$98
TROLLING LINE	122,302	73,425	\$28,323
SPECIES = BLUE MARLIN			
FLAGLINE	16,751	16,751	\$12,089
DEEP-SEA HANDLINE	11,238	10,753	\$3,746
TROLLING LINE	163,231	104,584	\$36,470
SPECIES = BROADBILL			
FLAGLINE	429	429	\$174
DEEP-SEA HANDLINE	2,549	2,267	\$1,433
TROLLING LINE	543	543	\$451
SPECIES = SAILFISH			
FLAGLINE	584	584	\$270
DEEP-SEA HANDLINE	457	381	\$150
TROLLING LINE	1,302	711	\$274
SPECIES = MAHIMAH I			
FLAGLINE	16,461	16,461	\$30,004
DEEP-SEA HANDLINE	24,800	23,805	\$35,036
INSHORE HANDLINE	369	323	\$452
TROLLING LINE	90,065	63,423	\$100,788
OTHER	7,395	7,341	\$12,120
SPECIES = ONO			
FLAGLINE	7,536	7,536	\$6,410
DEEP-SEA HANDLINE	43,024	39,680	\$33,335
INSHORE HANDLINE	717	717	\$622
TROLLING LINE	118,128	87,187	\$86,678
OTHER	277	277	\$250
SPECIES = SHARK			
DEEP-SEA HANDLINE	349	0	\$0
TROLLING LINE	260	0	\$0
OTHER	769	9	\$7

Table 1.--Continued.

GEAR	LB CAUGHT	LB SOLD	REVENUE
SPECIES = HAMMERHEAD SHARK			
INSHORE HANDLINE	27	0	\$0
OTHER	135	0	\$0
SPECIES = SHORTBILL SPEARFISH			
FLAGLINE	7,037	7,037	\$5,093
DEEP-SEA HANDLINE	1,049	1,049	\$853
TROLLING LINE	5,636	3,127	\$1,427
SPECIES = BLACK MARLIN			
FLAGLINE	419	419	\$443
DEEP-SEA HANDLINE	1,003	1,003	\$163
TROLLING LINE	5,451	4,042	\$1,627

II TABLE 1.--HDAR 1977 DATA BY SPECIES AND GEAR.

GEAR	LBCAUGHT	LBSOLD	REVENUE
SPECIES = SWORDFISH			
TROLLING LINE	138	138	\$62
SPECIES = STRIPED MARLIN			
FLAGLINE	69,933	69,933	\$86,260
DEEP-SEA HANDLINE	1,327	1,284	\$1,199
INSHORE HANDLINE	100	100	\$100
TROLLING LINE	19,976	11,819	\$9,646
SPECIES = BLUE MARLIN			
FLAGLINE	24,626	24,626	\$19,470
DEEP-SEA HANDLINE	16,753	13,730	\$6,109
TROLLING LINE	324,841	235,129	\$83,937
SPECIES = BROADBILL			
FLAGLINE	36,965	36,965	\$64,218
DEEP-SEA HANDLINE	3,980	3,980	\$3,389
TROLLING LINE	290	290	\$323
SPECIES = SAILFISH			
FLAGLINE	734	734	\$694
DEEP-SEA HANDLINE	133	65	\$40
TROLLING LINE	518	358	\$251
OTHER	22	22	\$13
SPECIES = MAHIMAH I			
FLAGLINE	14,867	14,867	\$29,464
DEEP-SEA HANDLINE	18,250	17,291	\$27,198
INSHORE HANDLINE	454	439	\$669
TROLLING LINE	107,995	83,716	\$150,881
OTHER	8,754	8,729	\$15,587
SPECIES = ONO			
FLAGLINE	12,184	12,184	\$11,168
DEEP-SEA HANDLINE	29,178	28,343	\$28,118
INSHORE HANDLINE	1,029	974	\$946
TROLLING LINE	180,467	147,434	\$163,022
OTHER	570	550	\$560

Table 1.--Continued.

GEAR	LBCAUGHT	LB SOLD	REVENUE
SPECIES = SHARK			
DEEP-SEA HANDLINE	1,243	550	\$130
INSHORE HANDLINE	680	0	\$0
TROLLING LINE	561	161	\$32
OTHER	897	157	\$45
SPECIES = HAMMERHEAD SHARK			
OTHER	40	0	\$0
SPECIES = SHORTBILL SPEARFISH			
FLAGLINE	6,430	6,430	\$4,594
DEEP-SEA HANDLINE	473	396	\$163
TROLLING LINE	5,779	2,989	\$1,545
OTHER	81	81	\$66
SPECIES = BLACK MARLIN			
FLAGLINE	463	463	\$575
DEEP-SEA HANDLINE	730	557	\$332
TROLLING LINE	6,884	4,473	\$1,648

II TABLE 1.--HDAR 1978 DATA BY SPECIES AND GEAR.

GEAR	LBCAUGHT	LBSOLD	REVENUE
SPECIES = STRIPED MARLIN			
FLAGLINE	105,271	105,271	\$145,366
DEEP-SEA HANDLINE	3,198	2,832	\$2,689
INSHORE HANDLINE	136	136	\$54
TROLLING LINE	38,416	27,927	\$26,543
SPECIES = BLUE MARLIN			
FLAGLINE	40,080	40,080	\$37,180
DEEP-SEA HANDLINE	12,144	11,797	\$5,225
INSHORE HANDLINE	1,114	1,114	\$465
TROLLING LINE	483,980	375,798	\$163,226
SPECIES = BROADBILL			
FLAGLINE	20,482	19,812	\$29,864
DEEP-SEA HANDLINE	9,056	9,056	\$10,340
INSHORE HANDLINE	47	47	\$47
TROLLING LINE	558	558	\$736
SPECIES = SAILFISH			
FLAGLINE	49	49	\$37
DEEP-SEA HANDLINE	113	113	\$85
TROLLING LINE	535	210	\$101
SPECIES = MAHIMAH			
FLAGLINE	10,422	10,422	\$23,285
DEEP-SEA HANDLINE	13,591	13,048	\$23,632
INSHORE HANDLINE	869	806	\$1,453
TROLLING LINE	96,616	76,578	\$151,238
OTHER	9,264	9,264	\$17,845
SPECIES = ONO			
FLAGLINE	10,173	10,173	\$13,153
DEEP-SEA HANDLINE	24,608	24,124	\$32,807
INSHORE HANDLINE	2,011	1,922	\$2,581
TROLLING LINE	158,056	131,077	\$176,667
OTHER	130	55	\$55

Table 1.--Continued.

GEAR	LBCAUGHT	LBSOLD	REVENUE
SPECIES = SHARK			
FLAGLINE	11,085	1,335	\$453
DEEP-SEA HANDLINE	4,122	1,436	\$542
INSHORE HANDLINE	531	166	\$72
TROLLING LINE	4,689	1,024	\$428
OTHER	243	43	\$2
SPECIES = HAMMERHEAD SHARK			
OTHER	1,527	--	--
SPECIES = SHORTBILL SPEARFISH			
FLAGLINE	11,168	11,168	\$12,639
DEEP-SEA HANDLINE	577	577	\$676
TROLLING LINE	12,974	8,051	\$6,391
SPECIES = BLACK MARLIN			
TROLLING LINE	1,368	424	\$434

II TABLE 1.--HDAR 1979 DATA BY SPECIES AND GEAR.

GEAR	LB CAUGHT	LBS SOLD	REVENUE
SPECIES = SWORDFISH			
DEEP-SEA HANDLINE	2	--	--
SPECIES = STRIPED MARLIN			
FLAGLINE	71,861	71,861	\$104,071
DEEP-SEA HANDLINE	5,404	5,224	\$6,389
TROLLING LINE	33,974	25,899	\$26,891
OTHER	562	307	\$325
SPECIES = BLUE MARLIN			
FLAGLINE	15,228	15,228	\$16,043
DEEP-SEA HANDLINE	14,782	14,380	\$10,683
TROLLING LINE	406,566	320,255	\$149,130
OTHER	893	893	\$168
SPECIES = BROADBILL			
FLAGLINE	14,798	14,798	\$24,394
DEEP-SEA HANDLINE	13,790	13,775	\$18,952
TROLLING LINE	350	121	\$96
SPECIES = SAILFISH			
FLAGLINE	750	750	\$639
DEEP-SEA HANDLINE	176	176	\$168
TROLLING LINE	1,355	681	\$407
SPECIES = MAHIMAH			
FLAGLINE	7,845	7,821	\$16,249
DEEP-SEA HANDLINE	23,639	22,408	\$41,691
INSHORE HANDLINE	101	80	\$127
TROLLING LINE	132,582	110,337	\$217,912
OTHER	10,381	10,336	\$17,770
SPECIES = ONO			
FLAGLINE	3,512	3,512	\$7,077
DEEP-SEA HANDLINE	21,895	20,971	\$35,364
INSHORE HANDLINE	282	232	\$361
TROLLING LINE	174,168	47,329	\$262,802
OTHER	122	97	\$209

Table 1.--Continued.

GEAR	LBCAUGHT	LBSOLD	REVENUE
SPECIES = SHARK			
FLAGLINE	1,405	1,405	\$585
DEEP-SEA HANDLINE	190	--	--
INSHORE HANDLINE	58	--	--
TROLLING LINE	1,615	304	\$43
OTHER	1,161	164	\$89
SPECIES = HAMMERHEAD SHARK			
TROLLING LINE	150	--	--
OTHER	1,880	--	--
SPECIES = SHORTBILL SPEARFISH			
FLAGLINE	4,369	4,369	\$5,245
DEEP-SEA HANDLINE	455	435	\$385
TROLLING LINE	11,671	7,964	\$8,829
OTHER	759	679	\$669
SPECIES = BLACK MARLIN			
FLAGLINE	244	244	\$282
DEEP-SEA HANDLINE	1,835	1,487	\$1,423
TROLLING LINE	9,061	6,429	\$3,011

II TABLE 1.--HDAR 1980 DATA BY SPECIES AND GEAR.

GEAR	LBCAUGHT	LBSOLD	REVENUE
SPECIES = STRIPED MARLIN			
FLAGLINE	24,414	24,414	\$28,140
DEEP-SEA HANDLINE	4,305	4,206	\$6,018
TROLLING LINE	38,247	30,090	\$36,015
SPECIES = BLUE MARLIN			
FLAGLINE	8,704	8,704	\$7,680
DEEP-SEA HANDLINE	26,389	24,074	\$13,868
TROLLING LINE	405,787	349,258	\$168,863
OTHER	650	650	\$195
SPECIES = BROADBILL			
FLAGLINE	695	695	\$1,238
DEEP-SEA HANDLINE	30,807	30,480	\$41,116
TROLLING LINE	1,032	1,032	\$1,219
OTHER	490	490	\$515
SPECIES = SAILFISH			
DEEP-SEA HANDLINE	447	407	\$416
TROLLING LINE	510	272	\$182
SPECIES = MAHIMAH			
FLAGLINE	8,852	8,784	\$18,527
DEEP-SEA HANDLINE	40,872	39,501	\$87,169
INSHORE HANDLINE	105	94	\$240
TROLLING LINE	180,281	154,688	\$333,762
OTHER	8,550	8,550	\$16,321
SPECIES = ONO			
FLAGLINE	2,595	2,595	\$4,602
DEEP-SEA HANDLINE	40,343	39,202	\$76,334
INSHORE HANDLINE	48	44	\$37
TROLLING LINE	223,035	196,497	\$370,600
OTHER	415	385	\$589

Table 1.--Continued.

GEAR	LB CAUGHT	LB SOLD	REVENUE
SPECIES = SHARK			
FLAGLINE	270	270	\$102
DEEP-SEA HANDLINE	5,257	241	\$90
INSHORE HANDLINE	1,333	13	\$6
TROLLING LINE	4,751	200	\$50
OTHER	621	21	\$12
SPECIES = HAMMERHEAD SHARK			
TROLLING LINE	219	120	\$35
OTHER	225	225	\$96
SPECIES = SHORTBILL SPEARFISH			
FLAGLINE	320	320	\$256
DEEP-SEA HANDLINE	642	515	\$468
INSHORE HANDLINE	6	6	\$8
TROLLING LINE	11,029	8,281	\$7,421
OTHER	1	1	\$1
SPECIES = BLACK MARLIN			
DEEP-SEA HANDLINE	527	249	\$447
TROLLING LINE	5,333	4,895	\$3,344
OTHER	10	4	\$2

II TABLE 1.--HDAR 1981 DATA BY SPECIES AND GEAR.

GEAR	LBCAUGHT	LBSOLD	REVENUE
SPECIES = STRIPED MARLIN			
FLAGLINE	11,659	11,659	\$14,234
DEEP-SEA HANDLINE	673	670	\$734
TROLLING LINE	18,778	14,543	\$17,785
SPECIES = BLUE MARLIN			
FLAGLINE	2,055	2,055	\$1,893
DEEP-SEA HANDLINE	6,468	5,772	\$5,692
TROLLING LINE	105,361	88,953	\$58,643
SPECIES = BROADBILL			
FLAGLINE	26	26	\$14
DEEP-SEA HANDLINE	1,635	1,581	\$2,755
SPECIES = SAILFISH			
FLAGLINE	103	103	\$85
DEEP-SEA HANDLINE	21	21	\$15
TROLLING LINE	260	180	\$183
SPECIES = MAHIMAH I			
FLAGLINE	3,103	3,058	\$7,335
DEEP-SEA HANDLINE	15,252	14,821	\$36,563
TROLLING LINE	71,338	60,999	\$145,463
OTHER	3,160	3,160	\$5,218
SPECIES = ONO			
FLAGLINE	497	497	\$1,231
DEEP-SEA HANDLINE	13,700	13,360	\$30,219
INSHORE HANDLINE	22	--	--
TROLLING LINE	52,902	48,006	\$112,579
OTHER	13	13	\$19
SPECIES = SHARK			
DEEP-SEA HANDLINE	3,891	650	\$306
INSHORE HANDLINE	793	--	--
TROLLING LINE	550	--	--
OTHER	1	1	\$1
SPECIES = HAMMERHEAD SHARK			
TROLLING LINE	200	--	--

Table 1.--Continued.

GEAR	LB CAUGHT	LB SOLD	REVENUE
SPECIES = SHORTBILL SPEARFISH			
FLAGLINE	67	67	\$50
DEEP-SEA HANDLINE	602	551	\$426
INSHORE HANDLINE	54	54	\$24
TROLLING LINE	5,277	3,601	\$4,084
SPECIES = BLACK MARLIN			
TROLLING LINE	3,857	3,491	\$2,075

II TABLE 2.--HDAR 1976 DATA BY SPECIES, GEAR, AND REGION.

REGION	LBCAUGHT	LBSOLD	REVENUE
SPECIES = STRIPED MARLIN GEAR = FLAGLINE			
0 TO 2 MILES	708	708	\$820
2 TO 20 MILES	67,317	67,317	\$71,689
BEYOND 20 MILES	6,239	6,239	\$8,609
SPECIES = STRIPED MARLIN GEAR = DEEP SEA HANDLINE			
0 TO 2 MILES	1,002	1,002	\$181
2 TO 20 MILES	10,895	9,942	\$3,841
BEYOND 20 MILES	442	442	\$398
SPECIES = STRIPED MARLIN GEAR = INSHORE HANDLINE			
0 TO 2 MILES	79	79	\$98
SPECIES = STRIPED MARLIN GEAR = TROLLING LINE			
0 TO 2 MILES	5,145	3,115	\$1,017
2 TO 20 MILES	115,602	68,775	\$26,081
BEYOND 20 MILES	1,485	1,485	\$1,150
OTHER	70	50	\$75
SPECIES = BLUE MARLIN GEAR = FLAGLINE			
0 TO 20 MILES	14,553	14,553	\$10,739
BEYOND 20 MILES	2,198	2,198	\$1,351
SPECIES = BLUE MARLIN GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	490	189	\$38
2 TO 20 MILES	10,748	10,564	\$3,708
SPECIES = BLUE MARLIN GEAR = TROLLING LINE			
0 TO 2 MILES	4,543	3,835	\$1,267
2 TO 20 MILES	154,514	97,079	\$33,522
BEYOND 20 MILES	4,174	3,670	\$1,681
SPECIES = BROADBILL GEAR = FLAGLINE			
2 TO 20 MILES	429	429	\$174
SPECIES = BROADBILL GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	103	103	\$52
2 TO 20 MILES	2,356	2,074	\$1,337
BEYOND 20 MILES	90	90	\$45

Table 2.--Continued.

REGION	LB CAUGHT	LB SOLD	REVENUE
SPECIES = BROADBILL GEAR = TROLLING LINE			
2 TO 20 MILES	543	543	\$451
SPECIES = SAILFISH GEAR = FLAGLINE			
2 TO 20 MILES	529	529	\$253
BEYOND 20 MILES	55	55	\$17
SPECIES = SAILFISH GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	46	46	\$14
2 TO 20 MILES	235	159	\$41
BEYOND 20 MILES	176	176	\$95
SPECIES = SAILFISH GEAR = TROLLING LINE			
0 TO 2 MILES	98	98	\$23
2 TO 20 MILES	1,204	613	\$251
SPECIES = MAHIMAH I GEAR = FLAGLINE			
2 TO 20 MILES	15,087	15,087	\$27,553
BEYOND 20 MILES	1,374	1,374	\$2,450
SPECIES = MAHIMAH I GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	992	820	\$1,112
2 TO 20 MILES	22,526	21,703	\$32,091
NORTHWESTERN H.I.	67	67	\$93
BEYOND 20 MILES	1,215	1,215	\$1,741
SPECIES = MAHIMAH I GEAR = INSHORE HANDLINE			
0 TO 2 MILES	262	216	\$316
2 TO 20 MILES	107	107	\$137
SPECIES = MAHIMAH I GEAR = TROLLING LINE			
0 TO 2 MILES	4,644	3,178	\$4,595
2 TO 20 MILES	82,987	58,340	\$92,483
BEYOND 20 MILES	2,332	1,818	\$3,579
OTHER	102	87	\$131

Table 2.--Continued.

REGION	LBCAUGHT	LBSOLD	REVENUE
	SPECIES = MAHIMAH	GEAR = OTHER	
0 TO 2 MILES	305	303	\$377
2 TO 20 MILES	5,958	5,906	\$10,205
BEYOND 20 MILES	1,132	1,132	\$1,538
	SPECIES = ONO	GEAR = FLAGLINE	
2 TO 20 MILES	5,843	5,843	\$5,120
BEYOND 20 MILES	1,693	1,693	\$1,290
	SPECIES = ONO	GEAR = DEEP-SEA HANDLINE	
0 TO 2 MILES	2,418	2,398	\$2,146
2 TO 20 MILES	32,202	28,908	\$24,969
NORTHWESTERN H.I.	8,200	8,200	\$6,082
BEYOND 20 MILES	204	174	\$138
	SPECIES = ONO	GEAR = INSHORE HANDLINE	
0 TO 2 MILES	547	547	\$458
2 TO 20 MILES	170	170	\$164
	SPECIES = ONO	GEAR = TROLLING LINE	
0 TO 2 MILES	19,220	15,321	\$16,565
2 TO 20 MILES	98,587	71,550	\$69,846
BEYOND 20 MILES	265	260	\$228
OTHER	56	56	\$39
	SPECIES = ONO	GEAR = OTHER	
2 TO 20 MILES	277	277	\$250
	SPECIES = SHARK	GEAR = DEEP-SEA HANDLINE	
0 TO 2 MILES	10	0	\$0
2 TO 20 MILES	339	0	\$0
	SPECIES = SHARK	GEAR = TROLLING LINE	
2 TO 20 MILES	260	0	\$0

Table 2.--Continued.

REGION	LB CAUGHT	LB SOLD	REVENUE
	SPECIES = SHARK	GEAR = OTHER	
0 TO 2 MILES	760	0	\$0
2 TO 20 MILES	9	9	\$7
	SPECIES = HAMMERHEAD SHARK	GEAR = INSHORE HANDLINE	
0 TO 2 MILES	27	0	\$0
	SPECIES = HAMMERHEAD SHARK	GEAR = OTHER	
0 TO 2 MILES	135	0	\$0
	SPECIES = SHORTBILL SPEARFISH	GEAR = FLAGLINE	
2 TO 20 MILES	5,692	5,692	\$4,067
BEYOND 20 MILES	1,345	1,345	\$1,026
	SPECIES = SHORTBILL SPEARFISH	GEAR = DEEP-SEA HANDLINE	
2 TO 20 MILES	395	395	\$189
BEYOND 20 MILES	654	654	\$664
	SPECIES = SHORTBILL SPEARFISH	GEAR = TROLLING LINE	
0 TO 2 MILES	414	65	\$89
2 TO 20 MILES	5,141	2,985	\$1,319
BEYOND 20 MILES	81	77	\$19
	SPECIES = BLACK MARLIN	GEAR = FLAGLINE	
2 TO 20 MILES	419	419	\$443
	SPECIES = BLACK MARLIN	GEAR = DEEP-SEA HANDLINE	
2 TO 20 MILES	1,003	1,003	\$163
	SPECIES = BLACK MARLIN	GEAR = TROLLING LINE	
2 TO 20 MILES	5,054	3,645	\$1,330
BEYOND 20 MILES	397	397	\$297

II TABLE 2.--HDAR 1977 DATA BY SPECIES, GEAR, AND REGION.

REGION	LB CAUGHT	LBS SOLD	REVENUE
SPECIES = SWORDFISH GEAR = TROLLING LINE			
2 TO 20 MILES	138	138	\$62
SPECIES = STRIPED MARLIN GEAR = FLAGLINE			
2 TO 20 MILES	64,772	64,772	\$79,657
BEYOND 20 MILES	5,161	5,161	\$6,603
SPECIES = STRIPED MARLIN GEAR = DEEP-SEA HANDLINE			
2 TO 20 MILES	1,217	1,174	\$1,095
BEYOND 20 MILES	110	110	\$105
SPECIES = STRIPED MARLIN GEAR = INSHORE HANDLINE			
2 TO 20 MILES	100	100	\$100
SPECIES = STRIPED MARLIN GEAR = TROLLING LINE			
0 TO 2 MILES	622	566	\$290
2 TO 20 MILES	18,923	10,922	\$9,086
BEYOND 20 MILES	381	331	\$270
OTHER	50	0	\$0
SPECIES = BLUE MARLIN GEAR = FLAGLINE			
2 TO 20 MILES	22,523	22,523	\$17,834
BEYOND 20 MILES	2,103	2,103	\$1,636
SPECIES = BLUE MARLIN GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	895	534	\$333
2 TO 20 MILES	15,858	13,196	\$5,776
SPECIES = BLUE MARLIN GEAR = TROLLING LINE			
0 TO 2 MILES	6,810	3,641	\$1,252
2 TO 20 MILES	314,008	228,526	\$81,502
BEYOND 20 MILES	4,023	2,962	\$1,183
SPECIES = BROADBILL GEAR = FLAGLINE			
2 TO 20 MILES	35,362	35,362	\$61,388
BEYOND 20 MILES	1,603	1,603	\$2,830

Table 2.--Continued.

REGION	LBCAUGHT	LBSOLD	REVENUE
SPECIES = BROADBILL GEAR = DEEP-SEA HANDLINE			
2 TO 20 MILES	3,756	3,756	\$3,191
BEYOND 20 MILES	224	224	\$198
SPECIES = BROADBILL GEAR = TROLLING LINE			
2 TO 20 MILES	290	290	\$323
SPECIES = SAILFISH GEAR = FLAGLINE			
2 TO 20 MILES	620	620	\$626
BEYOND 20 MILES	114	114	\$69
SPECIES = SAILFISH GEAR = DEEP-SEA HANDLINE			
2 TO 20 MILES	107	39	\$23
BEYOND 20 MILES	26	26	\$17
SPECIES = SAILFISH GEAR = TROLLING LINE			
0 TO 2 MILES	135	135	\$119
2 TO 20 MILES	376	223	\$133
BEYOND 20 MILES	7	0	\$0
SPECIES = SAILFISH GEAR = OTHER			
2 TO 20 MILES	22	22	\$13
SPECIES = MAHIMAH I GEAR = FLAGLINE			
0 TO 2 MILES	55	55	\$83
2 TO 20 MILES	13,805	13,805	\$27,620
BEYOND 20 MILES	1,007	1,007	\$1,761
SPECIES = MAHIMAH I GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	1,817	1,757	\$2,607
2 TO 20 MILES	15,462	14,563	\$22,993
BEYOND 20 MILES	971	971	\$1,598
SPECIES = MAHIMAH I GEAR = INSHORE HANDLINE			
0 TO 2 MILES	226	211	\$369
2 TO 20 MILES	228	228	\$299

Table 2.--Continued.

REGION	LBCAUGHT	LBSOLD	REVENUE
SPECIES = MAHIMAH I GEAR = TROLLING LINE			
0 TO 2 MILES	5,955	4,807	\$6,714
2 TO 20 MILES	100,538	77,578	\$141,838
NORTHWESTERN H.I.	20	20	\$30
BEYOND 20 MILES	1,482	1,311	\$2,299
SPECIES = MAHIMAH I GEAR = OTHER			
0 TO 2 MILES	293	293	\$480
2 TO 20 MILES	5,696	5,671	\$10,564
BEYOND 20 MILES	2,765	2,765	\$4,543
SPECIES = ONO GEAR = FLAGLINE			
2 TO 20 MILES	11,316	11,316	\$10,204
BEYOND 20 MILES	868	868	\$963
SPECIES = ONO GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	3,202	3,202	\$2,810
2 TO 20 MILES	24,237	23,402	\$23,408
NORTHWESTERN H.I.	612	612	\$817
BEYOND 20 MILES	1,127	1,127	\$1,082
SPECIES = ONO GEAR = INSHORE HANDLINE			
0 TO 2 MILES	224	224	\$196
2 TO 20 MILES	805	750	\$750
SPECIES = ONO GEAR = TROLLING LINE			
0 TO 2 MILES	26,730	23,109	\$26,810
2 TO 20 MILES	151,358	122,348	\$134,072
NORTHWESTERN H.I.	1,055	1,055	\$858
BEYOND 20 MILES	1,070	668	\$1,011
OTHER	254	254	\$270
SPECIES = ONO GEAR = OTHER			
0 TO 2 MILES	182	182	\$182
2 TO 20 MILES	380	360	\$372
BEYOND 20 MILES	8	8	\$6
SPECIES = SHARK GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	548	134	\$18
2 TO 20 MILES	695	416	\$112

Table 2.--Continued.

REGION	LBCAUGHT	LBSOLD	REVENUE
SPECIES = SHARK GEAR = INSHORE HANDLINE			
0 TO 2 MILES	450	0	\$0
BEYOND 20 MILES	230	0	\$0
SPECIES = SHARK GEAR = TROLLING LINE			
0 TO 2 MILES	100	0	\$0
2 TO 20 MILES	461	161	\$32
SPECIES = SHARK GEAR = OTHER			
0 TO 2 MILES	543	3	\$0
2 TO 20 MILES	354	154	\$45
SPECIES = HAMMERHEAD SHARK GEAR = OTHER			
0 TO 2 MILES	40	0	\$0
SPECIES = SHORTBILL SPEARFISH GEAR = FLAGLINE			
2 TO 20 MILES	6,133	6,133	\$4,419
BEYOND 20 MILES	297	297	\$175
SPECIES = SHORTBILL SPEARFISH GEAR = DEEP-SEA HANDLINE			
2 TO 20 MILES	473	396	\$163
SPECIES = SHORTBILL SPEARFISH GEAR = TROLLING LINE			
0 TO 2 MILES	74	74	\$47
2 TO 20 MILES	5,676	2,886	\$1,449
BEYOND 20 MILES	29	29	\$49
SPECIES = SHORTBILL SPEARFISH GEAR = OTHER			
0 TO 2 MILES	81	81	\$66
SPECIES = BLACK MARLIN GEAR = FLAGLINE			
2 TO 20 MILES	258	258	\$401
BEYOND 20 MILES	205	205	\$174
SPECIES = BLACK MARLIN GEAR = DEEP SEA HANDLINE			
2 TO 20 MILES	730	557	\$332

Table 2.--Continued.

REGION	LBCAUGHT	LBSOLD	REVENUE
	SPECIES = BLACK MARLIN	GEAR = TROLLING LINE	
2 TO 20 MILES	5,606	3,195	\$1,132
BEYOND 20 MILES	1,278	1,278	\$516

II TABLE 2.--HDAR 1978 DATA BY SPECIES, GEAR, AND REGION.

REGION	LBCAUGHT	LBSOLD	REVENUE
SPECIES = STRIPED MARLIN GEAR = FLAGLINE			
2 TO 20 MILES	87,889	87,889	\$124,052
BEYOND 20 MILES	17,382	17,382	\$21,314
SPECIES = STRIPED MARLIN GEAR = DEEP-SEA HANDLINE			
2 TO 20 MILES	2,613	2,287	\$2,280
BEYOND 20 MILES	585	545	\$409
SPECIES = STRIPED MARLIN GEAR = INSHORE HANDLINE			
0 TO 2 MILES	136	136	\$54
SPECIES = STRIPED MARLIN GEAR = TROLLING LINE			
0 TO 2 MILES	497	337	\$279
2 TO 20 MILES	36,752	26,545	\$25,476
BEYOND 20 MILES	1,167	1,045	\$789
SPECIES = BLUE MARLIN GEAR = FLAGLINE			
2 TO 20 MILES	34,622	34,622	\$32,643
BEYOND 20 MILES	5,458	5,458	\$4,536
SPECIES = BLUE MARLIN GEAR = DEEP-SEA HANDLINE			
2 TO 20 MILES	11,156	10,809	\$4,945
BEYOND 20 MILES	988	988	\$280
SPECIES = BLUE MARLIN GEAR = INSHORE HANDLINE			
0 TO 2 MILES	1,114	1,114	\$465
SPECIES = BLUE MARLIN GEAR = TROLLING LINE			
0 TO 2 MILES	6,863	3,822	\$1,716
2 TO 20 MILES	464,326	360,320	\$157,749
BEYOND 20 MILES	12,791	11,656	\$3,761
SPECIES = BROADBILL GEAR = FLAGLINE			
2 TO 20 MILES	11,952	11,282	\$17,181
BEYOND 20 MILES	8,530	8,530	\$12,683

Table 2.--Continued.

REGION	LBCAUGHT	LBSOLD	REVENUE
SPECIES = BROADBILL GEAR = DEEP-SEA HANDLINE			
2 TO 20 MILES	8,916	8,916	\$10,235
BEYOND 20 MILES	140	140	\$105
SPECIES = BROADBILL GEAR = INSHORE HANDLINE			
0 TO 2 MILES	47	47	\$47
SPECIES = BROADBILL GEAR = TROLLING LINE			
2 TO 20 MILES	558	558	\$736
SPECIES = SAILFISH GEAR = FLAGLINE			
2 TO 20 MILES	49	49	\$37
SPECIES = SAILFISH GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	70	70	\$70
2 TO 20 MILES	43	43	\$15
SPECIES = SAILFISH GEAR = TROLLING LINE			
2 TO 20 MILES	535	210	\$101
SPECIES = MAHIMAHI GEAR = FLAGLINE			
0 TO 2 MILES	881	881	\$1,469
2 TO 20 MILES	7,449	7,449	\$17,480
BEYOND 20 MILES	2,092	2,092	\$4,336
SPECIES = MAHIMAHI GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	307	307	\$486
2 TO 20 MILES	12,654	12,111	\$22,111
NORTHWESTERN H.I.	118	118	\$192
BEYOND 20 MILES	512	512	\$843
SPECIES = MAHIMAHI GEAR = INSHORE HANDLINE			
0 TO 2 MILES	850	787	\$1,424
2 TO 20 MILES	19	19	\$29

Table 2.--Continued.

REGION	LBCAUGHT	LBSOLD	REVENUE
SPECIES = MAHIMAH I GEAR = TROLLING LINE			
0 TO 2 MILES	3,898	2,984	\$4,908
2 TO 20 MILES	91,774	72,874	\$144,685
BEYOND 20 MILES	772	548	\$1,274
OTHER	172	172	\$371
SPECIES = MAHIMAH I GEAR = OTHER			
0 TO 2 MILES	4	4	\$6
2 TO 20 MILES	8,732	8,732	\$16,600
BEYOND 20 MILES	514	514	\$1,201
OTHER	14	14	\$38
SPECIES = ONO GEAR = FLAGLINE			
0 TO 2 MILES	534	534	\$775
2 TO 20 MILES	7,722	7,722	\$9,701
BEYOND 20 MILES	1,917	1,917	\$2,677
SPECIES = ONO GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	411	386	\$490
2 TO 20 MILES	21,887	21,438	\$27,124
BEYOND 20 MILES	314	304	\$354
SPECIES = ONO GEAR = INSHORE HANDLINE			
0 TO 2 MILES	1,943	1,888	\$2,529
2 TO 20 MILES	68	34	\$53
SPECIES = ONO GEAR = TROLLING LINE			
0 TO 2 MILES	13,951	11,303	\$16,131
2 TO 20 MILES	140,566	116,466	\$156,433
BEYOND 20 MILES	1,626	1,395	\$1,945
OTHER	1,913	1,913	\$2,157
SPECIES = ONO GEAR = OTHER			
0 TO 2 MILES	43	0	\$0
2 TO 20 MILES	87	55	\$55
SPECIES = SHARK GEAR = FLAGLINE			
2 TO 20 MILES	11,085	1,335	\$453

Table 2.--Continued.

REGION	LBCAUGHT	LBSOLD	REVENUE
SPECIES = SHARK GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	300	72	\$25
2 TO 20 MILES	3,740	1,282	\$472
BEYOND 20 MILES	82	82	\$44
SPECIES = SHARK GEAR = INSHORE HANDLINE			
0 TO 2 MILES	531	166	\$72
SPECIES = SHARK GEAR = TROLLING LINE			
0 TO 2 MILES	1,525	60	\$35
2 TO 20 MILES	3,164	964	\$393
SPECIES = SHARK GEAR = OTHER			
0 TO 2 MILES	243	43	\$2
SPECIES = HAMMERHEAD SHARK GEAR = OTHER			
0 TO 2 MILES	1,527	--	--
SPECIES = SHORTBILL SPEARFISH GEAR = FLAGLINE			
2 TO 20 MILES	9,719	9,719	\$11,023
BEYOND 20 MILES	1,449	1,449	\$1,616
SPECIES = SHORTBILL SPEARFISH GEAR = DEEP-SEA HANDLINE			
2 TO 20 MILES	577	577	\$676
SPECIES = SHORTBILL SPEARFISH GEAR = TROLLING LINE			
2 TO 20 MILES	12,637	7,744	\$6,109
BEYOND 20 MILES	337	307	\$282
SPECIES = BLACK MARLIN GEAR = TROLLING LINE			
2 TO 20 MILES	1,368	424	\$434

II TABLE 2.--HDAR 1979 DATA BY SPECIES, GEAR, AND REGION.

REGION	LBCAUGHT	LBSOLD	REVENUE
SPECIES = SWORDFISH GEAR = DEEP-SEA HANDLINE			
2 TO 20 MILES	2	--	--
SPECIES = STRIPED MARLIN GEAR = FLAGLINE			
2 TO 20 MILES	66,510	66,510	\$94,880
BEYOND 20 MILES	4,954	4,954	\$8,903
OTHER	397	397	\$288
SPECIES = STRIPED MARLIN GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	286	216	\$115
2 TO 20 MILES	4,474	4,364	\$5,493
BEYOND 20 MILES	644	644	\$781
SPECIES = STRIPED MARLIN GEAR = TROLLING LINE			
0 TO 2 MILES	989	837	\$992
2 TO 20 MILES	32,110	24,362	\$25,454
BEYOND 20 MILES	875	700	\$445
SPECIES = STRIPED MARLIN GEAR = OTHER			
2 TO 20 MILES	330	75	\$172
BEYOND 20 MILES	232	232	\$153
SPECIES = BLUE MARLIN GEAR = FLAGLINE			
2 TO 20 MILES	13,747	13,747	\$14,536
BEYOND 20 MILES	1,481	1,481	\$1,507
SPECIES = BLUE MARLIN GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	705	705	\$436
2 TO 20 MILES	12,508	12,211	\$8,980
BEYOND 20 MILES	1,569	1,464	\$1,267
SPECIES = BLUE MARLIN GEAR = TROLLING LINE			
0 TO 2 MILES	18,386	14,922	\$6,171
2 TO 20 MILES	374,958	294,078	\$138,877
BEYOND 20 MILES	13,042	11,255	\$4,082
OTHER	180	--	--

Table 2.--Continued.

REGION	LB CAUGHT	LB SOLD	REVENUE
SPECIES = BLUE MARLIN GEAR = OTHER			
2 TO 20 MILES	659	659	\$98
BEYOND 20 MILES	234	234	\$70
SPECIES = BROADBILL GEAR = FLAGLINE			
2 TO 20 MILES	14,278	14,278	\$23,566
BEYOND 20 MILES	220	220	\$330
OTHER	300	300	\$498
SPECIES = BROADBILL GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	827	812	\$1,152
2 TO 20 MILES	12,201	12,201	\$16,812
NORTHWESTERN H.I.	141	141	\$176
BEYOND 20 MILES	621	621	\$812
SPECIES = BROADBILL GEAR = TROLLING LINE			
2 TO 20 MILES	350	121	\$96
SPECIES = SAILFISH GEAR = FLAGLINE			
2 TO 20 MILES	677	677	\$597
BEYOND 20 MILES	73	73	\$42
SPECIES = SAILFISH GEAR = DEEP-SEA HANDLINE			
2 TO 20 MILES	99	99	\$82
BEYOND 20 MILES	77	77	\$86
SPECIES = SAILFISH GEAR = TROLLING LINE			
0 TO 2 MILES	152	77	\$56
2 TO 20 MILES	1,203	604	\$351
SPECIES = MAHIMAH I GEAR = FLAGLINE			
0 TO 2 MILES	510	510	\$920
2 TO 20 MILES	6,508	6,508	\$13,655
BEYOND 20 MILES	553	553	\$1,054
OTHER	274	250	\$620

Table 2.--Continued.

REGION	LBCAUGHT	LBSOLD	REVENUE
SPECIES = MAHIMAHI GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	2,314	2,061	\$3,261
2 TO 20 MILES	19,285	18,307	\$34,539
BEYOND 20 MILES	2,040	2,040	\$3,891
SPECIES = MAHIMAHI GEAR = INSHORE HANDLINE			
0 TO 2 MILES	87	80	\$127
2 TO 20 MILES	14	--	--
SPECIES = MAHIMAHI GEAR = TROLLING LINE			
0 TO 2 MILES	6,399	4,960	\$9,263
2 TO 20 MILES	124,447	104,039	\$206,138
NORTHWESTERN H.I.	30	30	\$30
BEYOND 20 MILES	1,395	997	\$1,834
OTHER	311	311	\$647
SPECIES = MAHIMAHI GEAR = OTHER			
0 TO 2 MILES	98	98	\$203
2 TO 20 MILES	6,492	6,447	\$12,328
BEYOND 20 MILES	3,754	3,754	\$5,205
OTHER	37	37	\$34
SPECIES = ONO GEAR = FLAGLINE			
0 TO 2 MILES	29	29	\$59
2 TO 20 MILES	2,741	2,741	\$5,247
BEYOND 20 MILES	445	445	\$1,206
OTHER	297	297	\$565
SPECIES = ONO GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	4,135	3,968	\$6,140
2 TO 20 MILES	16,826	16,148	\$27,170
NORTHWESTERN H.I.	96	96	\$133
BEYOND 20 MILES	833	759	\$1,921
OTHER	5	--	--
SPECIES = ONO GEAR = INSHORE HANDLINE			
0 TO 2 MILES	282	232	\$361

Table 2.--Continued.

REGION	LBCAUGHT	LBSOLD	REVENUE
SPECIES = ONO GEAR = TROLLING LINE			
0 TO 2 MILES	27,982	23,658	\$43,499
2 TO 20 MILES	136,589	114,537	\$199,021
NORTHWESTERN H.I.	7,094	7,094	\$16,001
BEYOND 20 MILES	1,285	822	\$1,256
OTHER	1,218	1,218	\$3,025
SPECIES = ONO GEAR = OTHER			
0 TO 2 MILES	28	28	\$65
2 TO 20 MILES	52	27	\$71
BEYOND 20 MILES	42	42	\$73
SPECIES = SHARK GEAR = FLAGLINE			
2 TO 20 MILES	871	871	\$397
BEYOND 20 MILES	534	534	\$188
SPECIES = SHARK GEAR = DEEP-SEA HANDLINE			
2 TO 20 MILES	190	--	--
SPECIES = SHARK GEAR = INSHORE HANDLINE			
0 TO 2 MILES	58	--	--
SPECIES = SHARK GEAR = TROLLING LINE			
0 TO 2 MILES	66	66	\$6
2 TO 20 MILES	1,549	238	\$37
SPECIES = SHARK GEAR = OTHER			
0 TO 2 MILES	1,026	29	\$48
2 TO 20 MILES	135	135	\$41
SPECIES = HAMMERHEAD SHARK GEAR = TROLLING LINE			
2 TO 20 MILES	150	--	--
SPECIES = HAMMERHEAD SHARK GEAR = OTHER			
0 TO 2 MILES	1,880	--	--

Table 2.--Continued.

REGION	LBCAUGHT	LBSOLD	REVENUE
SPECIES = SHORTBILL SPEARFISH GEAR = FLAGLINE			
2 TO 20 MILES	3,747	3,747	\$4,422
BEYOND 20 MILES	622	622	\$823
SPECIES = SHORTBILL SPEARFISH GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	45	45	\$56
2 TO 20 MILES	410	390	\$329
SPECIES = SHORTBILL SPEARFISH GEAR = TROLLING LINE			
0 TO 2 MILES	391	391	\$298
2 TO 20 MILES	11,013	7,425	\$8,383
BEYOND 20 MILES	229	110	\$129
OTHER	38	38	\$19
SPECIES = SHORTBILL SPEARFISH GEAR = OTHER			
0 TO 2 MILES	729	679	\$669
BEYOND 20 MILES	30	--	--
SPECIES = BLACK MARLIN GEAR = FLAGLINE			
2 TO 20 MILES	100	100	\$98
OTHER	144	144	\$184
SPECIES = BLACK MARLIN GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	202	202	\$101
2 TO 20 MILES	1,633	1,285	\$1,322
SPECIES = BLACK MARLIN GEAR = TROLLING LINE			
2 TO 20 MILES	8,618	6,111	\$2,860
BEYOND 20 MILES	443	318	\$151

II TABLE 2.--HDAR 1980 DATA BY SPECIES, GEAR, AND REGION.

REGION	LBCAUGHT	LBSOLD	REVENUE
SPECIES = STRIPED MARLIN GEAR = FLAGLINE			
2 TO 20 MILES	19,875	19,875	\$22,815
BEYOND 20 MILES	4,539	4,539	\$5,325
SPECIES = STRIPED MARLIN GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	449	449	\$337
2 TO 20 MILES	2,466	2,367	\$3,085
BEYOND 20 MILES	1,390	1,390	\$2,596
SPECIES = STRIPED MARLIN GEAR = TROLLING LINE			
0 TO 2 MILES	1,455	1,306	\$1,742
2 TO 20 MILES	36,229	28,261	\$33,679
BEYOND 20 MILES	486	446	\$496
OTHER	77	77	\$98
SPECIES = BLUE MARLIN GEAR = FLAGLINE			
2 TO 20 MILES	6,870	6,870	\$5,920
BEYOND 20 MILES	1,834	1,834	\$1,760
SPECIES = BLUE MARLIN GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	4,634	3,910	\$1,755
2 TO 20 MILES	20,565	18,974	\$10,971
BEYOND 20 MILES	1,190	1,190	\$1,142
SPECIES = BLUE MARLIN GEAR = TROLLING LINE			
0 TO 2 MILES	14,378	11,638	\$6,015
2 TO 20 MILES	382,176	330,882	\$159,730
NORTHWESTERN H.I.	173	173	\$96
BEYOND 20 MILES	9,060	6,565	\$3,022
SPECIES = BLUE MARLIN GEAR = OTHER			
2 TO 20 MILES	650	650	\$195
SPECIES = BROADBILL GEAR = FLAGLINE			
2 TO 20 MILES	489	489	\$1,028
BEYOND 20 MILES	206	206	\$210

Table 2.--Continued.

REGION	LBCAUGHT	LBSOLD	REVENUE
SPECIES = BROADBILL GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	445	445	\$632
2 TO 20 MILES	29,510	29,183	\$39,393
BEYOND 20 MILES	852	852	\$1,091
SPECIES = BROADBILL GEAR = TROLLING LINE			
0 TO 2 MILES	158	158	\$237
2 TO 20 MILES	874	874	\$982
SPECIES = BROADBILL GEAR = OTHER			
2 TO 20 MILES	490	490	\$515
SPECIES = SAILFISH GEAR = DEEP-SEA HANDLINE			
2 TO 20 MILES	273	233	\$126
BEYOND 20 MILES	174	174	\$290
SPECIES = SAILFISH GEAR = TROLLING LINE			
0 TO 2 MILES	64	--	--
2 TO 20 MILES	446	272	\$182
SPECIES = MAHIMAHİ GEAR = FLAGLINE			
2 TO 20 MILES	7,562	7,562	\$15,981
BEYOND 20 MILES	1,290	1,222	\$2,546
SPECIES = MAHIMAHİ GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	5,475	5,268	\$11,670
2 TO 20 MILES	33,537	32,508	\$71,323
BEYOND 20 MILES	1,854	1,719	\$4,167
OTHER	6	6	\$9
SPECIES = MAHIMAHİ GEAR = INSHORE HANDLINE			
0 TO 2 MILES	92	81	\$205
2 TO 20 MILES	13	13	\$35
SPECIES = MAHIMAHİ GEAR = TROLLING LINE			
0 TO 2 MILES	13,451	11,594	\$27,424
2 TO 20 MILES	164,732	141,667	\$303,092
NORTHWESTERN H.I.	352	352	\$808

Table 2.--Continued.

REGION	LBCAUGHT	LBSOLD	REVENUE
SPECIES = MAHIMAHI GEAR = TROLLING LINE			
BEYOND 20 MILES	1,676	1,018	\$2,349
SPECIES = MAHIMAHI GEAR = OTHER			
0 TO 2 MILES	66	66	\$100
2 TO 20 MILES	5,007	5,007	\$10,547
BEYOND 20 MILES	3,457	3,457	\$5,615
OTHER	20	20	\$59
SPECIES = ONO GEAR = FLAGLINE			
2 TO 20 MILES	2,014	2,014	\$3,295
BEYOND 20 MILES	581	581	\$1,307
SPECIES = ONO GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	5,035	5,010	\$9,239
2 TO 20 MILES	33,780	32,694	\$64,184
BEYOND 20 MILES	1,470	1,440	\$2,814
OTHER	58	58	\$97
SPECIES = ONO GEAR = INSHORE HANDLINE			
0 TO 2 MILES	48	44	\$37
SPECIES = ONO GEAR = TROLLING LINE			
0 TO 2 MILES	39,327	34,314	\$68,568
2 TO 20 MILES	178,897	157,802	\$293,694
NORTHWESTERN H.I.	3,713	3,713	\$7,245
BEYOND 20 MILES	960	530	\$927
OTHER	138	138	\$166
SPECIES = ONO GEAR = OTHER			
0 TO 2 MILES	107	107	\$161
2 TO 20 MILES	308	278	\$428
SPECIES = SHARK GEAR = FLAGLINE			
2 TO 20 MILES	101	101	\$35
BEYOND 20 MILES	169	169	\$67

Table 2.--Continued.

REGION	LBCAUGHT	LBSOLD	REVENUE
SPECIES = SHARK GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	4,666	--	--
2 TO 20 MILES	591	241	\$90
SPECIES = SHARK GEAR = INSHORE HANDLINE			
0 TO 2 MILES	1,333	13	\$6
SPECIES = SHARK GEAR = TROLLING LINE			
0 TO 2 MILES	763	113	\$39
2 TO 20 MILES	3,988	87	\$11
SPECIES = SHARK GEAR = OTHER			
0 TO 2 MILES	621	21	\$12
SPECIES = HAMMERHEAD SHARK GEAR = TROLLING LINE			
0 TO 2 MILES	95	--	--
2 TO 20 MILES	124	120	\$35
SPECIES = HAMMERHEAD SHARK GEAR = OTHER			
0 TO 2 MILES	225	225	\$96
SPECIES = SHORTBILL SPEARFISH GEAR = FLAGLINE			
2 TO 20 MILES	237	237	\$144
BEYOND 20 MILES	83	83	\$112
SPECIES = SHORTBILL SPEARFISH GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	108	108	\$134
2 TO 20 MILES	490	363	\$314
NORTHWESTERN H.I.	18	18	\$10
BEYOND 20 MILES	26	26	\$10
SPECIES = SHORTBILL SPEARFISH GEAR = INSHORE HANDLINE			
0 TO 2 MILES	6	6	\$8
SPECIES = SHORTBILL SPEARFISH GEAR = TROLLING LINE			
0 TO 2 MILES	271	201	\$186
2 TO 20 MILES	10,431	7,913	\$7,057
BEYOND 20 MILES	327	167	\$178

Table 2.--Continued.

REGION	LBCAUGHT	LBSOLD	REVENUE
SPECIES = SHORTBILL SPEARFISH GEAR = OTHER			
0 TO 2 MILES	1	1	\$1
SPECIES = BLACK MARLIN GEAR = DEEP-SEA HANDLINE			
2 TO 20 MILES	527	249	\$447
SPECIES = BLACK MARLIN GEAR = TROLLING LINE			
0 TO 2 MILES	455	455	\$291
2 TO 20 MILES	4,658	4,220	\$2,943
BEYOND 20 MILES	220	220	\$110
SPECIES = BLACK MARLIN GEAR = OTHER			
0 TO 2 MILES	10	4	\$2

II TABLE 2.--HDAR 1981 DATA BY SPECIES, GEAR, AND REGION.

REGION	LBCAUGHT	LBSOLD	REVENUE
SPECIES = STRIPED MARLIN GEAR = FLAGLINE			
2 TO 20 MILES	4,773	4,773	\$5,838
BEYOND 20 MILES	6,504	6,504	\$7,862
OTHER	382	382	\$534
SPECIES = STRIPED MARLIN GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	47	47	\$47
2 TO 20 MILES	588	585	\$665
NORTHWESTERN H.I.	38	38	\$22
SPECIES = STRIPED MARLIN GEAR = TROLLING LINE			
0 TO 2 MILES	454	404	\$786
2 TO 20 MILES	18,255	14,070	\$16,932
BEYOND 20 MILES	69	69	\$67
SPECIES = BLUE MARLIN GEAR = FLAGLINE			
2 TO 20 MILES	384	384	\$393
BEYOND 20 MILES	1,393	1,393	\$1,250
OTHER	278	278	\$250
SPECIES = BLUE MARLIN GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	546	430	\$561
2 TO 20 MILES	5,432	4,852	\$5,009
BEYOND 20 MILES	490	490	\$122
SPECIES = BLUE MARLIN GEAR = TROLLING LINE			
0 TO 2 MILES	2,278	1,798	\$1,292
2 TO 20 MILES	101,889	85,961	\$56,276
NORTHWESTERN H.I.	232	232	\$135
BEYOND 20 MILES	962	962	\$940
SPECIES = BROADBILL GEAR = FLAGLINE			
BEYOND 20 MILES	26	26	\$14
SPECIES = BROADBILL GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	14	14	\$10
2 TO 20 MILES	1,621	1,567	\$2,745

Table 2.--Continued.

REGION	LBCAUGHT	LBSOLD	REVENUE
SPECIES = SAILFISH GEAR = FLAGLINE			
BEYOND 20 MILES	103	103	\$85
SPECIES = SAILFISH GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	21	21	\$15
SPECIES = SAILFISH GEAR = TROLLING LINE			
2 TO 20 MILES	260	180	\$183
SPECIES = MAHIMAH I GEAR = FLAGLINE			
2 TO 20 MILES	2,514	2,514	\$6,027
BEYOND 20 MILES	589	544	\$1,308
SPECIES = MAHIMAH I GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	1,490	1,420	\$3,621
2 TO 20 MILES	13,287	13,026	\$32,248
NORTHWESTERN H.I.	31	31	\$57
BEYOND 20 MILES	435	335	\$619
OTHER	9	9	\$18
SPECIES = MAHIMAH I GEAR = TROLLING LINE			
0 TO 2 MILES	5,447	4,888	\$12,660
2 TO 20 MILES	64,521	54,781	\$129,142
NORTHWESTERN H.I.	104	104	\$442
BEYOND 20 MILES	1,253	1,213	\$3,192
OTHER	13	13	\$27
SPECIES = MAHIMAH I GEAR = OTHER			
0 TO 2 MILES	46	46	\$188
2 TO 20 MILES	2,797	2,797	\$4,046
BEYOND 20 MILES	317	317	\$984
SPECIES = ONO GEAR = FLAGLINE			
2 TO 20 MILES	329	329	\$817
BEYOND 20 MILES	168	168	\$414

Table 2.--Continued.

REGION	LBCAUGHT	LBSOLD	REVENUE
SPECIES = ONO GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	902	843	\$1,718
2 TO 20 MILES	12,705	12,424	\$28,321
BEYOND 20 MILES	93	93	\$180
SPECIES = ONO GEAR = INSHORE HANDLINE			
0 TO 2 MILES	22	--	--
SPECIES = ONO GEAR = TROLLING LINE			
0 TO 2 MILES	7,420	6,599	\$16,916
2 TO 20 MILES	42,248	38,186	\$88,595
NORTHWESTERN H.I.	2,537	2,537	\$5,023
BEYOND 20 MILES	484	471	\$1,439
OTHER	213	213	\$606
SPECIES = ONO GEAR = OTHER			
2 TO 20 MILES	13	13	\$19
SPECIES = SHARK GEAR = DEEP-SEA HANDLINE			
0 TO 2 MILES	281	--	--
2 TO 20 MILES	3,610	650	\$306
SPECIES = SHARK GEAR = INSHORE HANDLINE			
0 TO 2 MILES	793	--	--
SPECIES = SHARK GEAR = TROLLING LINE			
2 TO 20 MILES	550	--	--
SPECIES = SHARK GEAR = OTHER			
0 TO 2 MILES	1	1	\$1
SPECIES = HAMMERHEAD SHARK GEAR = TROLLING LINE			
2 TO 20 MILES	200	--	--
SPECIES = SHORTBILL SPEARFISH GEAR = FLAGLINE			
2 TO 20 MILES	67	67	\$50